



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/524,444	02/11/2005	Teruhiko Mochizuki	450100-04730	4577

7590 04/01/2009  
William S Frommer  
Frommer Lawrence & Haug  
745 Fifth Avenue  
New York, NY 10151

EXAMINER
----------

HEYI, HENOK G

ART UNIT	PAPER NUMBER
----------	--------------

2627

MAIL DATE	DELIVERY MODE
-----------	---------------

04/01/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/524,444	<b>Applicant(s)</b> MOCHIZUKI ET AL.	
	<b>Examiner</b> HENOK G. HEYI	<b>Art Unit</b> 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 December 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 8-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                      |                                                                   |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____                                                          | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed 12/16/2009 have been fully considered but they are not persuasive. Applicant argues that Hirofumi does not teach or suggest determination means for determining whether or not the first part of the first table includes a next unit recording area address, and when the first part of the first table does not include the next unit recording area address, a second part of the first table including the next unit recording area address is copied from the information recording medium, and the second part of the first table is stored on the storage means. However, that is an inherent feature of any file allocation table (FAT) and there is no novelty to what is being claimed.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 8-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirofumi JP 2000-276851 (Hirofumi hereinafter) in view of Huang US 2003/0126390 A1 (Huang hereinafter).

Re claim 8, Hirofumi teaches a playback apparatus for playing back a data file recorded in a distributed manner on an information recording medium (digital data playback equipment, para [0001] of detailed description), said playback apparatus comprising:

Art Unit: 2627

specification means for specifying a data file to be played back (reproduction mode is inputted with said operation switch 29 and the file name of desired digital coding compression data is specified, In advance of reading of the data of a designated file name, para [0029]); storage means for reading, from the information recording medium, a first part of a first table which provides a space corresponding to each of all unit recording areas of the information recording medium and storing the first part of the first table on the storage means (non volatile semiconductor memory divides data storage area, para [0004]); generation means for generating, based on said first table recorded by said storage means, a second table in which unit recording area addresses of said information recording medium (the list generation processing means of said microprocessor, para [0029]), which are used to record said data file specified by said specification means, are recorded in the forward direction (fast forwarding reproduction is possible to a forward direction, para [0001]); holding means for holding said second table generated by said generation means (it is shown that the cluster number 2 to data is recorded from a FAT entry, para [0027]); reading means for reading said data file from said information recording medium in accordance with said specified unit recording area addresses every time at normal playback time, fast forward playback time, and fast backward playback time (a FAT entry is read, and it loads to said RAM11. Next, the cluster number indicated for the FAT entry of the directory entry is read at Step #2, it is set as the top cluster number of a forward direction list, and said top cluster number is set as the end cluster number of an opposite direction list at Step #3, para [0037]); and indication means for indicating, to said reading means, said unit recording area

Art Unit: 2627

addresses to be read by referring to said second table held by said holding means (the following record cluster is shown is indicated and it is shown in a figure, It is indicated to the FAT data 3 at the top cluster 2, and is indicated like in the FAT data 100 etc. to the cluster 3 at the FAT data 4 and the cluster 4, This file data is completed to the cluster 6, and the numerals of FFFh are indicated to it as FAT data in which a cluster is shown, and data can distinguish what is recorded, para [0027]). Though it is an inherent feature of any storing system that uses FAT, Hirofumi doesn't explicitly teach determination means for determining whether or not the first part of the first table includes a next unit recording area address, wherein, when the first part of the first table does not include the next unit recording area address, a second part of the first table including the next unit recording area address is copied from the information recording medium, and the second part of the first table is stored on the storage means. However, Huang teaches a first and a second position data in FAT wherein the first position data provides address information about the second position data (see para [0026]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the playback apparatus of Hirofumi so that it will be able to determine whether or not the first part of the first table includes a next unit recording area address and in a case that it doesn't include the next recording area address, the address information would be copied from the information recording medium. The modification would have been obvious because of the benefit of knowing the next recording area address for fast reproduction.

Art Unit: 2627

Re claim 9, Hirofumi teaches the playback apparatus according to Claim 8, wherein, during normal playback, said indication means reads said unit recording area addresses, which are recorded in said second table, one-by-one in the forward direction, and indicates the unit recording area addresses to said reading means (the FAT data of the top cluster number of said forward direction is read by step #4. In Step #5, the FAT data read by said step #4 shows an end cluster, and the numerals FFFh distinguish, para [0037]).

Re claim 10, Hirofumi teaches the playback apparatus according to Claim 8, wherein, during fast forward playback, said indication means reads said unit recording area addresses recorded in said second table every predetermined number of the unit recording area addresses in the forward direction, and indicates the unit recording area addresses to said reading means (at the time of fast forwarding reproduction. The cluster number of a skip place is searched according to a forward direction list, para [0041]).

Re claim 11, Hirofumi teaches the playback apparatus according to Claim 8, wherein, during fast backward playback, said indication means reads said unit recording area addresses recorded in said second table every predetermined number of the unit recording area addresses in the reverse direction, and indicates the unit recording area addresses to said reading means (at the time of review reproduction, the cluster number of a skip place is searched according to an opposite direction list, and the record data of the cluster of a skip place becomes refreshable in an instant, Para [0041]).

Art Unit: 2627

Re claim 12, Hirofumi teaches a playback method for use with a playback apparatus for playing back a data file recorded in a distributed manner on an information recording medium (digital data playback equipment, para [0001] of detailed description), said playback method comprising: a specification step of specifying a data file to be played back (reproduction mode is inputted with said operation switch 29 and the file name of desired digital coding compression data is specified, In advance of reading of the data of a designated file name, para [0029]); storage means for reading, from the information recording medium, a first part of a first table which provides a space corresponding to each of all unit recording areas of the information recording medium and storing the first part of the first table on the storage means (non volatile semiconductor memory divides data storage area, para [0004]); a generation step of generating, based on said first table recorded in said storage step, a second table in which unit recording area addresses of said information recording medium (the list generation processing means of said microprocessor, para [0029]), which are used to record said data file specified in said specification step, are recorded in the forward direction (fast forwarding reproduction is possible to a forward direction, para [0001]); a holding step of holding said second table generated in said generation step (it is shown that the cluster number 2 to data is recorded from a FAT entry, para [0027]); a reading step of reading said data file from said information recording medium in accordance with said specified unit recording area addresses every time at normal playback time, fast forward playback time, and fast backward playback time (a FAT entry is read, and it loads to said RAM11. Next, the cluster number indicated for the FAT entry of the directory entry is read at

Step #2, it is set as the top cluster number of a forward direction list, and said top cluster number is set as the end cluster number of an opposite direction list at Step #3, para [0037]); and an indication step of indicating, to said reading step, said unit recording area addresses to be read by referring to said second table held in said holding step (the following record cluster is shown is indicated and it is shown in a figure, It is indicated to the FAT data 3 at the top cluster 2, and is indicated like in the FAT data 100 etc. to the cluster 3 at the FAT data 4 and the cluster 4, This file data is completed to the cluster 6, and the numerals of FFFh are indicated to it as FAT data in which a cluster is shown, and data can distinguish what is recorded, para [0027]).

Though it is an inherent feature of any storing system that uses FAT, Hirofumi doesn't explicitly teach determination means for determining whether or not the first part of the first table includes a next unit recording area address, wherein, when the first part of the first table does not include the next unit recording area address, a second part of the first table including the next unit recording area address is copied from the information recording medium, and the second part of the first table is stored on the storage means. However, Huang teaches a first and a second position data in FAT wherein the first position data provides address information about the second position data (see para [0026]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the playback apparatus of Hirofumi so that it will be able to determine whether or not the first part of the first table includes a next unit recording area address and in a case that it doesn't include the next recording area address, the address information would be copied from the information recording medium. The



modification would have been obvious because of the benefit of knowing the next recording area address for fast reproduction.

Re claim 13, Hirofumi teaches a recording medium (digital data playback equipment, para [0001] of detailed description) having recorded thereon a computer-readable program for use with a playback apparatus for playing back a data file recorded in a distributed manner on an information recording medium, said program comprising: a storage step of reading, from the information recording medium, a first part of a first table which provides a space corresponding to each of all unit recording areas of the information recording medium and storing the first part of the first table on the storage means (non volatile semiconductor memory divides data storage area, para [0004]); a generation step of generating, based on said first table recorded in said storage step, a second table in which unit recording area addresses of said information recording medium (the list generation processing means of said microprocessor, para [0029]), which are used to record said specified data file, are recorded in the forward direction (fast forwarding reproduction is possible to a forward direction, para [0001]); a holding step of holding said second table generated in said generation step (it is shown that the cluster number 2 to data is recorded from a FAT entry, para [0027]); a reading step of reading said data file from said information recording medium in accordance with said specified unit recording area addresses every time at normal playback time, fast forward playback time, and fast backward playback time (a FAT entry is read, and it loads to said RAM11. Next, the cluster number indicated for the FAT entry of the directory entry is read at Step #2, it is set as the top cluster number of a forward

Art Unit: 2627

direction list, and said top cluster number is set as the end cluster number of an opposite direction list at Step #3, para [0037]); and an indication step of indicating, to said reading step, said unit recording area addresses to be read by referring to said second table held in said holding step (the following record cluster is shown is indicated and it is shown in a figure, It is indicated to the FAT data 3 at the top cluster 2, and is indicated like in the FAT data 100 etc. to the cluster 3 at the FAT data 4 and the cluster 4, This file data is completed to the cluster 6, and the numerals of FFFh are indicated to it as FAT data in which a cluster is shown, and data can distinguish what is recorded, para [0027]). Though it is an inherent feature of any storing system that uses FAT, Hirofumi doesn't explicitly teach determination means for determining whether or not the first part of the first table includes a next unit recording area address, wherein, when the first part of the first table does not include the next unit recording area address, a second part of the first table including the next unit recording area address is copied from the information recording medium, and the second part of the first table is stored on the storage means. However, Huang teaches a first and a second position data in FAT wherein the first position data provides address information about the second position data (see para [0026]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the playback apparatus of Hirofumi so that it will be able to determine whether or not the first part of the first table includes a next unit recording area address and in a case that it doesn't include the next recording area address, the address information would be copied from the information recording

medium. The modification would have been obvious because of the benefit of knowing the next recording area address for fast reproduction.

### **Contact**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HENOK G. HEYI whose telephone number is (571)270-1816. The examiner can normally be reached on Monday to Friday 8:30 to 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on (571) 272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Joseph H. Feild/  
Supervisory Patent Examiner, Art  
Unit 2627

/Henok G Heyi/  
Examiner, Art Unit 2627

Application/Control Number: 10/524,444  
Art Unit: 2627

Page 11